

Re-run



4/18/25

RAW SEQUENCE LISTING

DATE: 11/12/2002

PATENT APPLICATION: US/09/651,150B

TIME: 16:54:27

Input Set : N:\paola\US09651150B.raw

Output Set: N:\CRF4\11122002\I651150B.raw

1 <110> APPLICANT: Payan, Donald
 2 <120> TITLE OF INVENTION: TOSO AS A TARGET FOR DRUG SCREENING
 3 <130> FILE REFERENCE: RIGL-002CON
 C--> 4 <140> CURRENT APPLICATION NUMBER: US/09/651,150B
 5 <141> CURRENT FILING DATE: 2000-08-30
 6 <150> PRIOR APPLICATION NUMBER: US 09/050,861
 7 <151> PRIOR FILING DATE: 1998-03-30
 8 <160> NUMBER OF SEQ ID NOS: 35
 9 <170> SOFTWARE: PatentIn version 3.1

ENTERED

11 <210> SEQ ID NO: 1
 12 <211> LENGTH: 1911
 13 <212> TYPE: DNA
 14 <213> ORGANISM: Homo sapiens
 15 <400> SEQUENCE: 1

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17	tctagaagg	acaatggact	tctggctttg	gccactttac	ttcctgccag	tatcaggggc	120
18	cctgaggatc	ctcccagaag	taaaggtaga	gggggagctg	ggcggatcag	ttaccatcaa	180
19	atgccactt	cctgaaatgc	atgtgaggat	atatctgtgc	cgggagatgg	ctggatctgg	240
20	aacatgtggt	accgtggtat	ccaccaccaa	cttcatcaag	gcagaataca	agggccgagt	300
21	tactctgaag	caatacccac	gcaagaatct	gttcttagtg	gaggtaacac	agctgacaga	360
22	aagtgcacgc	ggagtctatg	cctgcggagc	gggcatgaac	acagaccggg	gaaagaccca	420
23	gaaagtcacc	ctgaatgtcc	acagtgaata	cgagccatca	tgggaagagc	agccaatgcc	480
24	tgagactcca	aaatggtttc	atctgcccta	tttgttccag	atgcctgcac	atgccagttc	540
25	ttccaaattc	gtaaccagag	ttaccacacc	agctcaaagg	ggcaagggtc	ctccagttca	600
26	ccactccctc	cccaccacc	aaatcaccca	cgcctctcga	gtgtccagag	catcttcagt	660
27	agcagggtgac	aagccccgaa	ccttccctgcc	atccactaca	gcctcaaaaa	tctcagctct	720
28	ggaggggctg	ctcaagcccc	agacgcccag	ctacaaccac	cacaccaggg	tgcacaggca	780
29	gagagcactg	gactatggct	cacagtctgg	gagggaaggc	caaggatttc	acatcctgat	840
30	cccgaccatc	ctgggccttt	tcctgctggc	acttctgggg	ctgggtggtg	aaagggccgt	900
31	tgaaaggagg	aaagccctct	ccaggcgggc	ccgcccactg	gccgtgagga	tgcgcgccct	960
32	ggagagctcc	cagaggcccc	gcgggtcgcc	gcgaccgcgc	tcccaaaaac	acatctacag	1020
33	cgcctgcccc	cggcgcgctc	gtggagcgga	cgtgcaggc	acaggggagg	cccccgttcc	1080
34	cggccccgga	gcgcgcttgc	cccccgcccc	gctgcaggtg	tctgaatctc	cctggctcca	1140
35	tgccccatct	ctgaagacca	gctgtgaata	cgtgagcctc	taccaccagg	ctgccgccat	1200
36	gatggaggac	agtgattcag	atgactacat	caatgttcct	gcctgacaa	tccccagcta	1260
37	tcccccaacc	ccaggctcgg	actgtggtgc	caaggagtct	catctatctg	ctgatgtcca	1320
38	atacctgctt	catgtgttct	cagagccctc	atcacttccc	atgccccatc	tgcacttcca	1380
39	tccccactta	tctgtggccc	tgagcatggc	tctgccccca	ggtcgtcttg	cacaccttgg	1440
40	cagccccctg	tagttgacag	gtaagctgta	ggcatgtaga	gcaattgtcc	caatgccact	1500
41	tgcttccttt	ccaagccgtc	gaacagactg	tgggatttgc	agagtgttcc	ttccatgtct	1560
42	ttgaccacag	ggtgttgttg	ctgccaggct	ctagatcaca	tggcatcagg	ctggggcaga	1620
43	ggcatagcta	ttgtctcggg	catccttccc	agggttgggt	cttacacaaa	tagaaggctc	1680
44	ttgctctgag	ttatgtgacg	tgcttcagcc	ccatggacta	agcaggggtc	tgggtataaac	1740

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45      actcctggaa acgcctttgc cctgatccaa atggttagcac ttgctagtga acgtctactt      1800
46      atctcaagtt ctatgctaaa ggcaatttat cttgatgtga tgataaacca aacttattag      1860
47      caagatatgc atatatatcc ataaattctc tttactctgt ctccatcett t      1911
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 390
51 <212> TYPE: PRT
52 <213> ORGANISM: Homo sapiens
53 <400> SEQUENCE: 2
54      Met Asp Arg Trp Leu Trp Pro Leu Tyr Phe Leu Pro Val Ser Gly Ala
55      1              5              10              15
56      Leu Arg Ile Leu Pro Glu Val Lys Val Glu Gly Glu Leu Gly Gly Ser
57      20              25              30
58      Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
59      35              40              45
60      Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
61      50              55              60
62      Thr Asn Phe Ile Lys Ala Glu Tyr Lys Gly Arg Val Thr Leu Lys Gln
63      65              70              75              80
64      Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
65      85              90              95
66      Ser Asp Ser Gly Val Tyr Ala Cys Gly Ala Gly Met Asn Thr Asp Arg
67      100             105             110
68      Gly Lys Thr Gln Lys Val Thr Leu Asn Val His Ser Glu Tyr Glu Pro
69      115             120             125
70      Ser Trp Glu Glu Gln Pro Met Pro Glu Thr Pro Lys Trp Phe His Leu
71      130             135             140
72      Pro Tyr Leu Phe Gln Met Pro Ala Tyr Ala Ser Ser Ser Lys Phe Val
73      145             150             155             160
74      Thr Arg Val Thr Thr Pro Ala Gln Arg Gly Lys Val Pro Pro Val His
75      165             170             175
76      His Ser Ser Pro Thr Thr Gln Ile Thr His Arg Pro Arg Val Ser Arg
77      180             185             190
78      Ala Ser Ser Val Ala Gly Asp Lys Pro Arg Thr Phe Leu Pro Ser Thr
79      195             200             205
80      Thr Ala Ser Lys Ile Ser Ala Leu Glu Gly Leu Leu Lys Pro Gln Thr
81      210             215             220
82      Pro Ser Tyr Asn His His Thr Arg Leu His Arg Gln Arg Ala Leu Asp
83      225             230             235             240
84      Tyr Gly Ser Gln Ser Gly Arg Glu Gly Gln Gly Phe His Ile Leu Ile
85      245             250             255
86      Pro Thr Ile Leu Gly Leu Phe Leu Leu Ala Leu Leu Gly Leu Val Val
87      260             265             270
88      Lys Arg Ala Val Glu Arg Arg Lys Ala Leu Ser Arg Arg Ala Arg Arg
89      275             280             285
90      Leu Ala Val Arg Met Arg Ala Leu Glu Ser Ser Gln Arg Pro Arg Gly
91      290             295             300
92      Ser Pro Arg Pro Arg Ser Gln Asn Asn Ile Tyr Ser Ala Cys Pro Arg
93      305             310             315             320
94      Arg Ala Arg Gly Ala Asp Ala Ala Gly Thr Gly Glu Ala Pro Val Pro

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95          325          330          335
96 Gly Pro Gly Ala Pro Leu Pro Pro Ala Pro Leu Gln Val Ser Glu Ser
97          340          345          350
98 Pro Trp Leu His Ala Pro Ser Leu Lys Thr Ser Cys Glu Tyr Val Ser
99          355          360          365
100 Leu Tyr His Gln Pro Ala Ala Met Met Glu Asp Ser Asp Ser Asp Asp
101          370          375          380
102 Tyr Ile Asn Val Pro Ala
103          385          390
105 <210> SEQ ID NO: 3
106 <211> LENGTH: 73
107 <212> TYPE: PRT
108 <213> ORGANISM: Homo sapiens
109 <400> SEQUENCE: 3
110 Val Thr Ile Lys Cys Pro Leu Pro Glu Met His Val Arg Ile Tyr Leu
111 1          5          10          15
112 Cys Arg Glu Met Ala Gly Ser Gly Thr Cys Gly Thr Val Val Ser Thr
113          20          25          30
114 Thr Asn Phe Ile Lys Ala Glu Trp Lys Gly Arg Val Thr Leu Lys Gln
115          35          40          45
116 Tyr Pro Arg Lys Asn Leu Phe Leu Val Glu Val Thr Gln Leu Thr Glu
117          50          55          60
118 Ser Asp Ser Gly Val Tyr Ala Cys Gly
119          65          70
121 <210> SEQ ID NO: 4
122 <211> LENGTH: 79
123 <212> TYPE: PRT
124 <213> ORGANISM: Homo sapiens
125 <400> SEQUENCE: 4
126 Leu Ser Leu Thr Cys Thr Val Ser Gly Ser Thr Phe Ser Asn Asp Tyr
127 1          5          10          15
128 Tyr Thr Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile Gly
129          20          25          30
130 Tyr Val Phe Tyr His Gly Thr Ser Asp Asp Thr Thr Pro Leu Arg Ser
131          35          40          45
132 Arg Val Thr Met Leu Val Asp Thr Ser Lys Asn Gln Phe Ser Leu Arg
133          50          55          60
134 Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys Ala
135          65          70          75
137 <210> SEQ ID NO: 5
138 <211> LENGTH: 73
139 <212> TYPE: PRT
140 <213> ORGANISM: Homo sapiens
141 <400> SEQUENCE: 5
142 Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser Asn
143 1          5          10          15
144 Tyr Ala Asn Trp Val Gln Gln Lys Pro Asp His Leu Phe Thr Gly Ile
145          20          25          30
146 Gly Gly Thr Asn Asn Arg Ala Pro Gly Val Pro Ala Arg Phe Ser Gly

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147          35          40          45
148      Ser Leu Ile Gly Asn Lys Ala Ala Leu Thr Ile Thr Gly Ala Gln Thr
149          50          55          60
150      Glu Asp Glu Ala Ile Tyr Phe Cys Ala
151      65          70
153 <210> SEQ ID NO: 6
154 <211> LENGTH: 72
155 <212> TYPE: PRT
156 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 6
158      Thr Ser Leu Asn Cys Thr Phe Ser Asp Ser Ala Ser Gln Tyr Phe Trp
159      1          5          10          15
160      Trp Tyr Arg Gln His Ser Gly Lys Ala Pro Lys Ala Leu Met Ser Ile
161          20          25          30
162      Phe Ser Asn Gly Glu Lys Glu Glu Gly Arg Phe Thr Ile His Leu Asn
163          35          40          45
164      Lys Ala Ser Leu His Phe Ser Leu His Ile Arg Asp Ser Gln Pro Ser
165          50          55          60
166      Asp Ser Ala Leu Tyr Leu Cys Ala
167      65          70
169 <210> SEQ ID NO: 7
170 <211> LENGTH: 75
171 <212> TYPE: PRT
172 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 7
174      Val Thr Leu Arg Cys Lys Pro Ile Ser Gly His Asn Ser Leu Phe Trp
175      1          5          10          15
176      Tyr Arg Gln Thr Met Met Arg Gly Leu Glu Leu Leu Ile Tyr Phe Asn
177          20          25          30
178      Asn Asn Val Pro Ile Asp Asp Ser Gly Met Pro Glu Asp Arg Phe Ser
179          35          40          45
180      Ala Lys Met Pro Asn Ala Ser Phe Ser Thr Leu Lys Ile Gln Pro Ser
181          50          55          60
182      Glu Pro Arg Asp Ser Ala Val Tyr Phe Cys Ala
183      65          70          75
185 <210> SEQ ID NO: 8
186 <211> LENGTH: 74
187 <212> TYPE: PRT
188 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 8
190      Val Glu Leu Thr Cys Thr Ala Ser Gln Lys Lys Ser Ile Gln Phe His
191      1          5          10          15
192      Trp Lys Asn Ser Asn Gln Ile Lys Ile Leu Gly Asn Gln Gly Ser Phe
193          20          25          30
194      Leu Thr Lys Gly Pro Ser Lys Leu Asn Asp Arg Ala Asp Ser Arg Arg
195          35          40          45
196      Ser Leu Trp Asp Gln Gly Asn Phe Pro Leu Ile Ile Lys Asn Leu Lys
197          50          55          60
198      Ile Glu Asp Ser Asp Thr Tyr Ile Cys Glu

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199      65      70
201 <210> SEQ ID NO: 9
202 <211> LENGTH: 80
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
205 <400> SEQUENCE: 9
206      Ala Lys Met Ser Cys Glu Ala Lys Thr Phe Pro Lys Gly Thr Thr Ile
207      1      5      10      15
208      Tyr Trp Leu Arg Glu Leu Gln Asp Ser Asn Lys Asn Lys His Phe Glu
209      20      25      30
210      Phe Leu Ala Ser Arg Thr Ser Thr Lys Gly Ile Lys Tyr Gly Glu Arg
211      35      40      45
212      Val Lys Lys Asn Met Thr Leu Ser Phe Asn Ser Thr Leu Pro Phe Leu
213      50      55      60
214      Lys Ile Met Asp Val Lys Pro Glu Asp Ser Gly Phe Tyr Phe Cys Ala
215      65      70      75      80
217 <210> SEQ ID NO: 10
218 <211> LENGTH: 76
219 <212> TYPE: PRT
220 <213> ORGANISM: Homo sapiens
221 <400> SEQUENCE: 10
222      Val Thr Ile Thr Cys Pro Phe Thr Tyr Ala Thr Arg Gln Leu Lys Lys
223      1      5      10      15
224      Ser Phe Tyr Lys Val Glu Asp Gly Glu Leu Val Leu Ile Ile Asp Ser
225      20      25      30
226      Ser Ser Lys Glu Ala Lys Asp Pro Arg Tyr Lys Gly Arg Ile Thr Leu
227      35      40      45
228      Gln Ile Gln Ser Thr Thr Ala Lys Glu Phe Thr Val Thr Leu Lys His
229      50      55      60
230      Leu Gln Leu Asn Asp Ala Gly Gln Tyr Val Cys Gln
231      65      70      75
233 <210> SEQ ID NO: 11
234 <211> LENGTH: 84
235 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
237 <220> FEATURE:
238 <221> NAME/KEY: MISC_FEATURE
239 <222> LOCATION: (6)..(51)
240 <223> OTHER INFORMATION: "Xaa" at positions 6-7, 9-18, 20, 22, 25-32, 34-35, 37-48
and 50
241      -51 can be any amino acid.
242 <220> FEATURE:
243 <221> NAME/KEY: MISC_FEATURE
244 <222> LOCATION: (53)..(53)
245 <223> OTHER INFORMATION: "Xaa" at position 53 can be Phe, Val, or Ile.
246 <220> FEATURE:
247 <221> NAME/KEY: MISC_FEATURE
248 <222> LOCATION: (54)..(76)
249 <223> OTHER INFORMATION: "Xaa" at positions 54-65, 71, and 73-76 can be any amino
acid.
250 <220> FEATURE:

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RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. 6,7,9,10,11,12,13,14,15,16,17,18,20,22,25,26,27,28,29,30
Seq#:11; Xaa Pos. 31,32,34,35,37,38,39,40,41,42,43,44,45,46,47,48,50,51,53
Seq#:11; Xaa Pos. 54,55,56,57,58,59,60,61,62,63,64,65,71,73,74,75,76,79,80
Seq#:11; Xaa Pos. 82
Seq#:25; Xaa Pos. 3,4,6

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:11; Line(s) 240,249

VERIFICATION SUMMARY

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Input Set : N:\paola\US09651150B.raw

Output Set: N:\CRF4\11122002\I651150B.raw

L:4 M:270 C: Current Application Number differs, Wrong Format
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:16
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:32
L:265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:48
L:267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:64
L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:80
L:409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0